

## Comparison of body composition (BMI, WHR and % BF) in patients with acute coronary syndrome

### Abstract:

**Background and Purpose:** Obesity is associated with many cardiovascular diseases and metabolic disorders and thereby is involved in the development of cardiovascular events and mortality and morbidity. The purpose of this study was to compare body composition indices (BMI and BF% and WHR) in patients with acute coronary syndrome.

**Materials and Methods:** Research method is Cross-sectional study and the statistical population Included that all patients admitted with a diagnosis of acute coronary syndrome during the summer quarter, 2012 in Ardabil Imam Khomeini Hospital. Collected data using descriptive statistics and Chi-Square tests, Monte Carlo and Independent samples t-test and analysis software were SPSS<sub>16</sub>.

**Results:** In patients with Coronary syndrome frequency of acceptable status in all three indicators is less and frequency of unacceptable status is much more. Also between the observed and expected frequency in different status for each of all three indicators (BMI, BF% and WHR), there was a significant difference ( $0/05 \geq P$ ). There were no significant differences between mean of each indicators (BMI, BF% and WHR) in two groups of acute coronary syndrome. ( $0/05 \leq P$ ).

**Conclusions:** In both male and female patients with a diagnosis of acute coronary syndrome, BMI is less important than the other indicators. In female patients WHR and in male patients BF% is given priority.

**Key words:** acute coronary syndrome, obesity, body mass index, body fat percentage, waist to hip ratio.